

City of Tallahassee Electric Utility Eastern Transmission Line Project

Project Need:

Over the last decade, the City has experienced significant growth and development, and a corresponding increase in the demand for electricity. This has been especially true in the fast growing eastern portion of the City and adjacent Leon County where development has outpaced the construction of electric transmission lines and substations. The currently inadequate transmission and substation network in this large and rapidly growing part of the City's service area creates a reliability concern.

As a standard design practice for reliability, residential and commercial customers electricity needs should be able to be supplied from a number of alternative substations in the area when a major outage occurs. These alternative substations are all linked together by a transmission line network. When major outages occur, the City must currently rely on the lower voltage distribution system to keep the power flowing to its customers. This lower voltage system has capacity limits, which means we would not be able to keep an uninterrupted flow of power to this area in the event of a major outage. Further, much of this system is currently served by a one-way feed from distant substations, so that a distribution line failure would effectively leave all customers beyond that point without power until the cause of the outage was found and repaired. This level of service is not consistent with our customers' needs or expectations.

The only acceptable and permanent way of providing a reliable source of electricity and providing for continuing growth to the eastern part of Tallahassee is to reinforce this area with the proper substation and transmission infrastructure. This infrastructure cannot wait any longer. A temporary substation has already been constructed, and now an additional distribution feeder is needed to support the area load. Growth on the electric system continues and the load is projected to increase at a rate of approximately 3 percent per year in the near future. Considering that substations in the east part of the service territory are approaching maximum load, major problems are likely to occur if the proposed substation and transmission line are not in service by the 2004/2005 winter peak.

Project History:

- Initial Work began on the Mahan Route in 2001.
- City Commission approved the construction of an overhead transmission line along Mahan Drive June 13, 2001.
- However, after further consideration of the fact that Mahan serves as a major gateway into the city, and based on the desire to get additional citizen involvement, the construction was postponed until an Independent Route Study could be conducted.
- A Route Study was conducted by EDAW/Exponential Engineering Co. from June 2002 to June 2003.
- Public Workshops were held on August 27, 2002 and April 22, 2003, after 7000 notices were mailed to the neighborhoods, notices were published in the Tallahassee Democrat and signage was provided in the impacted area.
- Public Comments were recorded at both workshops, and the comment period after second workshop was extended until May 26, 2003 to provide additional time for responses.
- The Final Report from the route consultant was submitted to the City in late September 2003.
- The route consultant recommended Route N as the preferred route to carry forward. Route F was his second highest recommended preferred route (see attached Route Map).

Route Analysis

- The route consultant developed a total of 33 potential routes. Six of the highest ranked alternative routes were presented to the community at the Second Public Workshop.
- After the Second Public Workshop, the consultant reexamined and revised his scoring which caused some changes in the final scoring on various routes. Route AD was one of the highest ranked alternative routes presented at the second Public Workshop. It was subsequently replaced by the consultant with Route N, which was not disclosed to the City until June 27, 2003 (From a public perspective, this route should be viewed very comparable to Route AD, because it utilizes significant portions of that route).



Estimates

- Overhead Line Construction estimates for these routes are as follows:
Route A: \$5,400,000 Route E: \$5,800,000 Route F: \$ 6,700,000
Route N: \$8,900,000 Route P: \$10,000,000 Route T: \$12,000,000.
- Estimates for Construction of combination Underground/Overhead Lines; that portion of each route that is located on either Mahan or Buck Lake Roads to be installed underground:
Route A: \$35,300,000 Route E: \$26,700,000 Route F: \$ 26,900,000
Route N: \$17,500,000 Route P: \$11,000,000 Route T: \$14,700,000

Recommendation by Electric Utility Staff

Staff does not concur with the consultant's recommendation. Instead, staff recommends Route A for the following reasons:

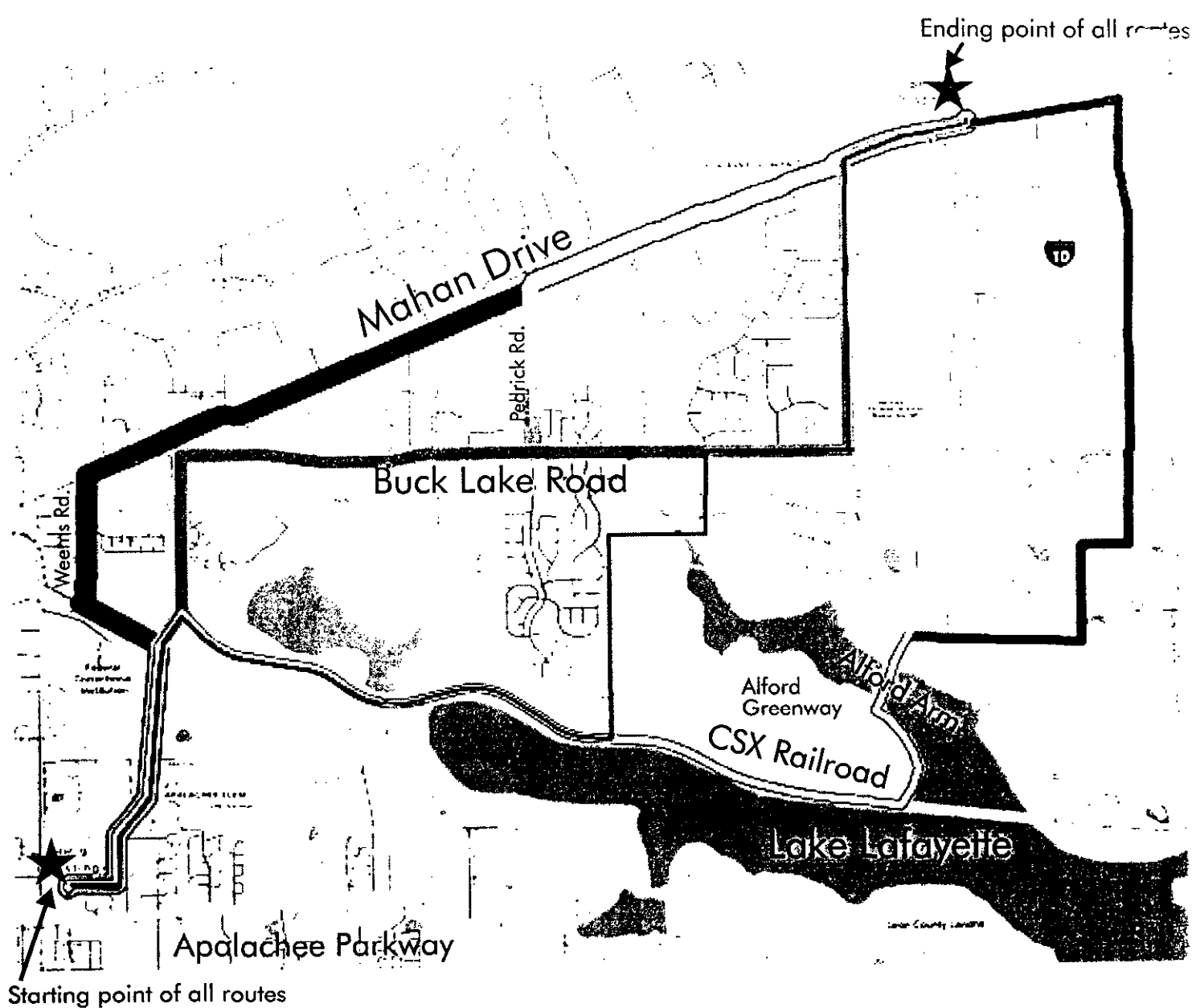
- a. The survey data from the first Public Workshop had the highest number of respondents, 22 out of a total 65, asking for "a route with the least impact on families, homes, and land, which would mean using only existing right-of-way, main roads, and commercial areas. Route A is the route that follows this request as closely as possible
- b. An overwhelming majority of the responding public preferred this route to the alternatives presented at the second Public Workshop. Below is the compilation of the resident's preference:

Route A	177
Route E	5
Route F	6
Route P	53
Route T	51
Route AD	19
Route O	1
No route	1
Don't favor or don't have a preferred route	7
Information is too much and not relevant for what is needed	1
Don't favor any route as long as the line is underground	1
- c. Route A is the most economical overhead line route.
- d. The use of Route N as the preferred alternative is problematic, including liability terms generally imposed by CSX upon owners of facilities in the railway right-of-way. The City Attorney's Office has recommended against the use of CSX Right of Way for this reason.
- e. Route N impacts approximately 3.5 miles of homes and land not currently impacted by any overhead electric line. Route F impacts approximately 2.33 miles of homes and land not currently impacted by any overhead electric line. All of proposed Route A is currently impacted by overhead electric lines.
- f. This same land for route N or Route F could require the City to condemn some of the property for construction of the transmission line. Route A is proposed to be built on existing right-of-way (with the exception of approximately 450' along the north side of Mahan Drive near Weems Road).
- g. Finally, the survey data suggests that the public perceives Buck Lake Road different in character than Mahan Drive. Mahan Drive is considered a major highway through the community while Buck Lake Road is considered a rural route. The community prefers that it be kept this way. Any route (Routes E, F, and N) that includes the use of Buck Lake Road would impact the rural character.







Next Steps in Process

- a. Approximately 7600 direct mail postcards were mailed to residents to notify them of the consultant's study report conclusion and staff's recommendation.
- b. An Agenda Item will be presented on December 10 requesting City Commission approval of the recommended route.
- c. Additional comments can be made via the City's web site, with the results to be shared with the Tallahassee City Commission prior to action on the recommendation.

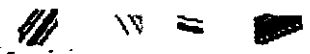
Eastern Transmission Line Primary Alternative Routes





Legend

- Route A 
- Route E 
- Route F 
- Route P 
- Route T 
- Route N 

Routes that follow the same path are represented by multiple stacked colors.



The beginning point for all routes is the existing substation located east of Capital Circle and north of Apalachee Parkway indicated by  colored star. The end point is a proposed substation at Mystic Warrior Trail indicated by  colored star.

In order to best utilize these descriptions, you may want to print this page to compare it to the map on page one.

Attachment # 4
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Route A [REDACTED]

Begins at the existing substation east of Capital Circle and north of Apalachee Parkway. It follows an existing transmission line easement to the east and north through Tom Brown Park to Weems Road. The route continues north along Weems Road, over the top of the existing distribution line to Mahan Drive. The route then turns east along Mahan Drive all the way to the proposed substation at Mystic Warrior Trail.

Route E

Begins at the existing substation east of Capital Circle and north of Apalachee Parkway. It follows an existing transmission line easement to the east and north through Tom Brown Park. The route then turns to the northeast to the CSX railway corridor and then east again between the Weems Plantation Development and Fallschase. It continues north to Buck Lake Road and then east along Buck Lake Road. The route then turns north at Pedrick Road to Mahan Drive. The route then turns to the east along Mahan Drive to the proposed Substation at Mystic Warrior Trail.

Route F [REDACTED]

Begins at the existing substation east of Capital Circle and north of Apalachee Parkway. It follows an existing transmission line easement to the east and north to Tom Brown Park. The route would then turn to the northeast following the CSX railway corridor and then east between the Weems Plantation Development and Fallschase. It would continue north to Buck Lake Road and then east along Buck Lake Road. The route then turns north just east of Alameda Drive to Mahan Drive just east of the interstate interchange. The route then turns east to the proposed substation at Mystic Warrior Trail.

Route P

Begins at the existing substation east of Capital Circle and north of Apalachee Parkway. It follows an existing transmission line easement to the east and north through Tom Brown Park. The route would then turn northeast to the CSX railway corridor. The route then follows the railway to the eastern edge of the Alford Arm Greenway. The route then turns north along Old Dirt Road and to Mahan Drive east of the interchange. It then turns east to the proposed substation at Mystic Warrior Trail.

Route T [REDACTED]

Begins at existing substation east of Capital Circle and north of Apalachee Parkway. It follows an existing transmission line easement to the east and north through Tom Brown Park. The route would then turn northeast to the CSX railway corridor. The route then follows the railway to the eastern edge of the Alford Arm Greenway where it would turn to the north. It continues north, northwest and then northeast for approximately one mile before turning east. The route would then move east for approximately eight tenths of a mile. The route then turns north for approximately ½ mile. It then turns east again for approximately .25 mile. It then turns again to the north to Mahan Drive and the proposed substation at Mystic Warrior Trail.

Route N [REDACTED]

Begins at the existing substation east of Capital Circle and north of Apalachee Parkway. It follows an existing transmission line easement to the east and north through Tom Brown Park. The route would then turn northeast to the CSX Railway corridor. The route then follows the railway to the western edge of the Alford Arm Greenway. It turns north here following the western edge of the greenway to Nabb Road. The route turns east here to Rutledge Road where it turns north to Buck Lake Road. At Buck Lake Road the route turns to the east and follows Buck Lake Road to just east of Alameda Drive. The route then turns north to Mahan Drive just east of the interstate interchange. The route then turns east to the proposed substation at Mystic Warrior Trail.